Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 14017-008US1	Application No. 10/519,122
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR 1.98(b))		Applicant Gary A. Clawson et al.	
		Filing Date August 8, 2005	Group Art Unit 1635

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
/SM/	1	4,511,713	04/16/85	Miller et al.			
	2	4,560,678	12/24/85	Ranson			
	3	4,689,320	08/25/87	Kaji			
	4	4,740,463	04/26/88	Weinberg et al.			
	5	4,814,268	03/21/89	Kreider et al.			
	6	4,849,331	07/18/89	Lorincz			
	7	4,849,332	07/18/89	Lorincz			
	8	4,849,334	07/18/89	Lorincz			
	9	4,908,306	03/13/90	Lorincz			
	10	4,983,728	01/08/91	Herzog et al.			
	11	5,023,243	06/11/91	Tullis			
	12	5,057,411	10/15/91	Lancaster et al.			
	13	5,071,757	12/10/91	Kreider et al.			
	14	5,126,331	06/30/92	Gazzani			
	15	5,142,032	08/25/92	Grimmel et al.			
	16	5,187,090	02/16/93	de Villiers et al.			
	17	5,190,931	03/02/93	Inouye			
	18	5,272,065	12/21/93	Inouye et al.			
	19	5,334,761	08/02/94	Gebeyehu et al.			
	20	5,411,857	05/02/95	Beaudenon et al.			
	21	5,457,189	10/10/95	Crooke et al.			
	22	5,491,133	02/13/96	Walder et al.			
	23	5,543,417	08/06/96	Waldstreicher			
	24	5,554,538	09/10/96	Cole et al.			
	25	5,578,475	11/26/96	Jessee			
	26	5,580,547	12/03/96	Gilchrest et al.			
/SM/	27	5,589,466	12/31/96	Felgner et al.			

Examiner Signature	Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 14017-008US1	Application No. 10/519,122
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Gary A. Clawson et al.	
		Filing Date August 8, 2005	Group Art Unit 1635

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
/SM/	28	5,591,574	01/07/97	Orth et al.			
	29	5,595,884	01/21/97	Androphy et al.			
	30	5,627,159	05/06/97	Shih et al.			
	31	5,643,715	07/01/97	Lancaster			
	32	5,656,423	08/12/97	Orth et al.			
	33	5,665,580	09/09/97	Crooke et al.			
	34	5,674,835	10/07/97	Androphy et al.			
	35	5,681,944	10/28/97	Crooke et al.			
	36	5,712,092	01/27/98	Orth et al.			
	37	5,736,392	04/07/98	Hawley-Nelson et al.			
	38	5,739,013	04/14/98	Budowsky et al.			
	39	5,756,282	05/26/98	Crooke et al.			
	40	5,776,502	07/07/98	Foulkes et al.			
	41	5,811,232	09/22/98	Crooke et al.			
	42	5,821,050	10/13/98	Cowsert et al.			
	43	5,824,519	10/20/98	Norris et al.			
	44	5,837,856	11/17/98	Arnold, Jr. et al.			
	45	5,876,922	03/02/99	Orth et al.			
	46	5,919,619	07/06/99	Tullis			
	47	5,952,487	09/14/99	Philipp et al.			
	48	5,955,597	09/21/99	Arnold, Jr. et al.			
	49	5,962,425	10/05/99	Walder et al.			
	50	5,981,173	11/09/99	Orth et al.			
	51	5,986,083	11/16/99	Dwyer et al.			
	52	6,020,202	02/01/00	Jessee			
	53	6,022,863	02/08/00	Peyman			
/SM/	54	6,025,163	02/15/00	Shamanin et al.			

Examiner Signature	Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 14017-008US1	Application No. 10/519,122
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Gary A. Clawson et al.	
		Filing Date August 8, 2005	Group Art Unit 1635

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
/SM/	55	6,028,188	02/22/00	Arnold, Jr. et al.			
	56	6,051,429	04/18/00	Hawley-Nelson et al.			
	57	6,060,456	05/09/00	Arnold, Jr. et al.			
	58	6,075,012	06/13/00	Gebeyehu et al.			
	59	6,084,090	07/04/00	DiPaolo et al.			
	60	6,087,341	07/11/00	Khavari et al.			
	61	6,107,086	08/22/00	Cole et al.			
	62	6,127,164	10/03/00	de Villiers et al.			
	63	6,136,332	10/24/00	Grollier et al.			
	64	6,172,048	01/09/01	Behr et al.			
	65	6,174,870	01/16/01	Crooke et al.			
	66	6,271,359	08/07/01	Norris et al.			
	67	6,326,174	12/04/01	Joyce et al.			
	68	6,506,559	01/14/03	Fire et al.			
/SM/	69	60/449,066	02/21/03	Clawson			

Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation Yes	Translation No
/SM/	70	EP 477 972	09/04/96	EPO				
	71	WO 93/20095	10/14/93	WIPO				
	72	WO 95/28942	11/02/95	WIPO				
	73	WO 96/20013	07/04/96	WIPO				
	74	WO 97/27206	07/31/97	WIPO				
	75	WO 98/04575	02/05/98	WIPO				
	76	WO 98/37240	08/27/98	WIPO				
	77	WO 99/14377	03/25/99	WIPO				
/SM/	78	WO 00/09673	02/24/00	WIPO				

Examiner Signature	Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 14017-008US1	Application No. 10/519,122
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Gary A. Clawson et al.	
		Filing Date August 8, 2005	Group Art Unit 1635

Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation Yes	Translation No
/SM/	79	WO 00/14244	03/16/00	WIPO				
/SM/	80	WO 00/34466	06/15/00	WIPO				
/SM/	81	WO 00/60115	10/12/00	WIPO				
/SM/	82	WO 02/46449	06/13/02	WIPO				

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
/SM/	83	GenBank Accession No. K02718 dated 3/18/94, 6 pages
	84	GenBank Accession No. M14119 dated 6/2/94, 6 pages
	85	GenBank Accession No. X05015 dated 4/18/05, 6 pages
	86	Alvarez-Salas et al., "Inhibition of *HPV-16 E6/E7* immortalization of normal keratinocytes by hairpin ribozymes," Proc. Natl. Acad. Sci. USA, 1998, 95:1189-1194
	87	Alvarez-Salas et al., "Growth Inhibition of Cervical Tumor Cells by Antisense Oligodeoxynucleotides Directed to the Human Papillomavirus Type 16 E6 Gene," Antisense Nucleic Acid Drug Dev., 1999, 9:441-450
	88	Benedict et al., "Triple ribozyme-mediated down-regulation of the retinoblastoma gene," Carcinogenesis, 1998, 19(7):1223-1230
	89	Beutner et al., "Treatment of genital warts with an immune-response modifier (iquimod)," J. Am. Acad. Dermatol., 1998, 38:230-239
	90	Boletta et al., "High Efficient Non-Viral Gene Delivery to the Rat Kidney by Novel Polycationic Vectors," J. Am. Soc. Nephrol., 1996, 7(9):1728, Abstract only
	91	Buhr et al., "Ribozyme termination of RNA transcripts down-regulate seed fatty acid genes in transgenic soybean," Plant J., 2002, 30(2):155-163
	92	Chen et al., "Effectiveness of three ribozymes for cleavage of an RNA transcript from human papillomavirus type 18," Cancer Gene Ther., 1995, 2(4):263-271
	93	Choo et al., "Retrovirus-Mediated Delivery of HPV16 E7 Antisense RNA Inhibited Tumorigenicity of CaSki Cells," Gynecol. Oncol., 2000, 78:293-301
	94	Crone et al., "Growth Inhibition by a Triple Ribozyme Targeted to Repetitive B2 Transcripts," Hepatology, 1999, 29:1114-1123
	95	Feldman and Sen, "A New and Efficient DNA Enzyme for the Sequence-specific Cleavage of RNA," J. Mol. Biol., 2001, 313:283-294
	96	Garber, "Prescription RNA," Technology Review, 2002, pp. 42-48
	97	Herasse et al., "Expression and Functional Characteristics of Calpain 3 Isoforms Generated through Tissue-Specific Transcriptional and Posttranscriptional Events," Mol. Cell. Biol., 1999, 19(6):4047-4055
/SM/	98	Jiang and Milner, "Selective silencing of viral gene expression in HPV-positive human cervical carcinoma cells treated with siRNA, a primer of RNA interference," Oncogene, 2002, 21:6041-6048

Examiner Signature	Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute Form PTO-1449 (Modified) U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 14017-008US1	Application No. 10/519,122
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))	Applicant Gary A. Clawson et al.	
	Filing Date August 8, 2005	Group Art Unit 1635

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
/SM/	99	Kreider et al., "Laboratory Production In Vivo of Infectious Human Papillomavirus Type 11," J. Virol., 1987, 61(2):590-593
	100	Kunke et al., "Preclinical study on gene therapy of cervical carcinoma using adeno-associated virus vectors," Cancer Gene Ther., 2000, 7(5):766-777
	101	Laemmli, "Cleavage of Structural Proteins during the Assembly of the Head of Bacteriophage T4," Nature, 1970, 227:680-685
	102	Lewis et al., "Non-specific antiviral activity of antisense molecules targeted to the E1 region of human papillomavirus," Antiviral Res., 2000, 48:187-196
	103	Lieber and Strauss, "Selection of Efficient Cleavage Sites in Target RNAs by Using a Ribozyme Expression Library," Mol. Cell. Biol., 1995, 15(1):540-551
	104	Madrigal et al., "*In Vitro* Antigene Therapy Targeting HPV-16 E6 and E7 in Cervical Carcinoma," Gynecol. Oncol., 1997, 64:18-25
	105	Nedbal and Sczakiel, "Hammerhead Ribozyme Activity in the Presence of Low Molecular Weight Cellular Extract," Antisense Nucleic Acid Drug Dev., 1997, 7:585-589
	106	Okumoto et al., "Factors that Contribute to Efficient Catalytic Activity of a Small Ca^{2+}-Dependent Deoxyribozyme in Relation to Its RNA Cleavage Function," Biochemistry, 2003, 42(7):2158-2165
	107	Pan et al. "A selection system for identifying accessible sites in target RNAs," RNA, 2001, 7:610-621
	108	Pan et al., "Rapid identification of efficient target cleavage sites using a hammerhead ribozyme library in an iterative manner," Mol. Therapy, 2003, 7:129-139
	109	Pfaffl et al., "Relative expression software tool (REST©) for group-wise comparison and statistical analysis of relative expression results in real-time PCR," Nucl. Acids Res., 2002, 30(9):e36, 10 pages
	111	Rorke, "Antisense Human Papillomavirus (HPV) E6/E7 Expression, Reduced Stability of Epidermal Growth Factor, and Diminished Growth of HPV-Positive Tumor Cells," J. Natl. Can. Inst., 1997, 89(17):1243-1246
	112	Santiago et al., "New DNA Enzyme Targeting Egr-1 mRNA Inhibits Vascular Smooth Muscle Proliferation and Regrowth after Injury," Nat. Med., 1999, 5(11):1264-1269
	113	Santoro and Joyce, "A general purpose RNA-cleaving DNA enzyme," Proc. Natl. Acad. Sci. USA, 1997, 94(9):4262-4266
	114	Schwarze et al., "In Vivo Protein Transduction: Delivery of a Biologically Active Protein Into the Mouse," Science, 1999, 285:1569-1572
	115	Slebos et al., "p53-dependent G_1 arrest involves pRB-related proteins and is disrupted by the human papillomavirus 16 E7 oncoprotein," Proc. Natl. Acad. Sci. USA, 1994, 91:5320-5324
	116	Stacey et al., "Scanning the structure and antigenicity of HPV-16 E6 and E7 oncoproteins using antipeptide antibodies," Oncogene, 1994, 9:635-645
	117	Takagi et al., "Mechanism of action of hammerhead ribozymes and their applications *in vivo*: rapid identification of functional genes in the post-genome era by novel hybrid ribozyme libraries," Biochem. Soc. Trans., 2002, 30(6):1145-1149
	118	Tan and Ting, "*In Vitro* and *in Vivo* Inhibition of Human Papillomavirus Type 16 *E6* and *E7* Genes," Cancer Res., 1995, 55:4599-4605
/SM/	119	Templeton et al., "Improved DNA: liposome complexes for increased systemic delivery and gene expression," Nat. Biotechnol., 1997, 15:647-652

Examiner Signature /Sean Mcgarry/	Date Considered 08/27/2007

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 14017-008US1	Application No. 10/519,122
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Gary A. Clawson et al.	
		Filing Date August 8, 2005	Group Art Unit 1635

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	120	Venturini et al., "Kinetic selection of HPV 16 *E6/E7*-directed antisense nucleic acids: anti-proliferative effects on HPV 16-transformed cells," Nucl. Acids Res., 1999. 27(7):1585-1592
	121	Walboomers et al., "Human Papillomavirus is a Necessary Cause of Invasive Cervical Cancer Worldwide," J. Pathol., 1999, 189:12-19
	122	Walder et al., "Use of PCR primers containing a 3'-terminal ribose residue to prevent cross-contamination of amplified sequences," Nucl. Acids Res., 1993, 21(18):4339-4343
	123	Zhang et al., "Involvement of the Fungal Nuclear Migration Gene *nudC* Human Homolog in Cell Proliferation and Mitotic Spindle Formation," Exp. Cell Res., 2002, 273:73-84
	124	Zheng et al., "Effects of anti-HPV16E6-ribozyme on phenotype and gene expression of a cervical cancer cell line," Chin. Med. J., 2002, 115(10):1501-1506
	125	zur Hausen, "Molecular Pathogenesis of Cancer of the Cervix and Its Causation by Specific Human Papillomavirus Types," Curr. Top. Microbiol. Immunol., 1994, 186:131-156

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	